## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary Report No: WIR-012058
Address: 333 Burma Road Date Inspected: 27-Jan-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

**CWI Name: CWI Present:** Yes Yu Dong Ping, Liu Zhong An No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

# BAY 10 NORTH TOWER LIFT 2 SKIN A, B, C, D PADEYES

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

NSD1-SA164A/F-20~33 (SKIN A, GREEN TAG NO. 11599)

NSD1-SA163A/D-30~39 (SKIN B, GREEN TAG NO. 11600)

NSD1-SA16B/D-40~43 (SKIN B, GREEN TAG NO. 11600)

NSD1-SA171A/D-43~46 (SKIN C, GREEN TAG NO. 8381R1)

NSD1-SA223A/E-19, 20 (SKIN D, GREEN TAG NO. 8382R1)

This Quality Assurance (QA) Inspector observed the following work in progress:

**BAY 10** 

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

#### SOUTH TOWER LIFT 4 A/E CORNER BACKFILL PLATE REPAIR

SMAW welding of weld joint 100(Repair) located on SSTL4-1F/L.

Welder is identified as 057220. ZPMC QC is identified as Mr. Yuan Hui Gang.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-2G(2F)-REPAIR.

#### NORTH TOWER LIFT 4 D/E CORNER BACKFILL PLATE

FCAW welding of weld joint 91 located on NSTL4-3K/L.

Welder is identified as 040533. ZPMC QC is identified as Mr. Wang Hao.

The welding variables recorded by QC appeared to comply with WPS-B-T-4333-Tc-P4-F.

## NORTH TOWER LIFT 4 D/E CORNER BACKFILL PLATE

FCAW welding of weld joint 21 located on NSTL4-3I/L.

Welder is identified as 053869. ZPMC QC is identified as Mr. Wang Hao.

The welding variables recorded by QC appeared to comply with WPS-B-T-4332-Tc-P4-F.

#### **BAY 11**

## TOWER STRUT ANGLE CONNECTION PLATE

SAW welding of weld joint 1B located on ND1-SA4-68-123M-1.

Welder is identified as 042195. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

## TOWER STRUT WEB PLATE

SAW welding of weld joint 6A located on ED1-STSA4-10-119M-2.

Welder is identified as 044550. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

#### TOWER STRUT WEB PLATE

SAW welding of weld joint 3B located on ND1-STSA4-6-123M-1.

Welder is identified as 040699. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest: 15000422360, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

**Inspected By:** Gaikwad,Umesh Quality Assurance Inspector **Reviewed By:** Clifford, William QA Reviewer